NICD.	Voc	1	No
NCR:	Yes	/	No

NGB	/ N				WORK ORDER NON-		NEO P	MANCE / LIDE	ATF		DQA:	Da	ate: -	
NCR: Y	es / No				WORK ORDER WORK		VI OIN	VIANCE / OI D			QA Closed:	Da	ate:	
Work Orde	r:			· · · · · · · · · · · · · · · · · · ·	DISPOSITION	_			AGAINST	DEP	ARTMENT			
Part N NCR N		_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Scrap Machining Small Fab.  Use-as-is Thermoforming Finishing		Crosstube Small Fab Finishing Composite		Water . Prod. Eng. Co Rec/Store/Packag Suppl			Engineering Quality Other		
Root					ption of work order update	1	nitial	Actio			Sign &			
Cause	Date	Step	Qty		or Non-conformance Chief Eng Description		$\dashv$	Date	Verification	on	QC Inspector			
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Fraining Jnapproved							LT CATEGORY							
Landin	g Gear				General		0, 1,12			-			<u>.</u>	
	Bending Centre No Cracks Crushed/ Cuffs Heat Trea Inspectio Ripples in Torque W	Crimped of of Strip in of Bend daves in E equence	Tube		Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing Finish		Instruct Mainte Mislabe Misread Offset Out of	ion Incomplete tions Incomplete/U enance eled	nclear		Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned \( \) Power Loss/	ct issing Vrong		Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
	Wave/Twist in Tube Folio Outside Dimensions						Outside							

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

April-16-13 12:36:25 PM

Work Order ID: 99938

\*99938\*

Parent Item:

646.4001

\*646 4001\*

Parent Item Name: AS350 Cable Cutter

**Start Date:** 4/16/13

Required Date: 4/30/13

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP REV:A 12.10.23 NEW ISSUE DD VERF:JLM

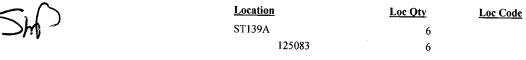
				. 210 10 2111									1
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
646.3301 *646 3301 Upper Cutter Assembly	*	Manufactured	No			-	Each	25.0000	**	-			
	3m/>	,		Location ST139A		<u>Loc (</u>	<u>Oty</u> 7	Loc Code					

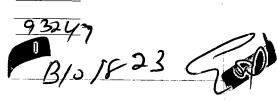
			Location	<u>n</u>	Loc Oty	Loc Code	
21812			ST139A		7		
				125083	7		
			ST545		. 18		
				93247	18		
646.3001	Manufactured	No	~~		Each	17.0000	
<u>*646 300</u> 1*						*:	*

$\leq$			Location	Loc Qty	Loc Code
>m>		1974 - 1974 - 1974 - 1974 - 1974 - 1974 - 1974 - 1974 - 1974 - 1974 - 1974 - 1974 - 1974 - 1974 - 1974 - 1974	ST139A	9	
			125083	9	
			ST537	8	
.*			93425	. 8	
	Manufactured	No		Each	6.0000
<b>™</b>			. *		4



646.2910







		,	
NCR:	Yes	/	No

DQA: \_\_\_\_\_Date: \_\_\_\_

NCR: Y	es / No				WORK ORDER NON-	CONFC	אאנ	MANCE / UP	DATE	QA Closed:	Date	::
Work Orde	r·		<u></u>		DISPOSITION		·		AGAINST DE	PARTMENT	PROCESS	
Part N	<del></del>				Rework Scrap	]	<b>I I I I I I I I I I</b>		Crosstube Small Fab	Water Jet Prod. Eng. Coor.		Engineering Quality
NCR N	0	<u>.</u>						Finishing Composite	Rec/Store/Packaging Other Supplier			
Root				Descri	ption of work order update	Initia	al	Ac	tion	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief I	Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data				,			l					
Equip/Tooling	_											
Operator	_			i i								
Material	_				•							
Setup												
Other	$\dashv$					İ						
Process Supplier	-					}						
Training	-								•			·
Unapproved			ļ. 					·				
···				<u> </u>	F	AULT C	ATEC	GORY				
Landin	g Gear				General					_		
	Bending				Bend	Gra	ain			Ovalized		Pressure/Forced
	Centre No	ot Conce	ntric to	o/s	BOM/Route	Har	dwa	re		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged	Insp	pecti	on Incomplete		Part Incorre	ct	Weld
	Crushed/	Crimped.			Burrs	Inst	tructi	ions Incomplete/	'Unclear	Part Lost/Mi	issing	Wrong Stock Pulled
	Cuffs		•		Contamination		inte	nance		Part Moved		
	Heat Treat Countersink		Mis	slabe	led		Positioned V		<del></del>			
	Inspection	n Strip in	Tube		Cut Too Short	Mis	read	l		Power Loss/	Surge	Other
	Ripples in	Bend			Drill Holes	Off						
	Torque W	aves in E	xtrusio	n L	Drawing	<b>├</b> ──		Calibration				<del></del>
	Turning S				Finish	Out of Sequence						
Wave/Twist in Tube Folio			Folio	Out	tside	Dimensions						

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

April-16-13 12:36:25 PM

Work Order ID: 99938

\*99938\*

Parent Item:

646,4001

\*646 4001\*

Parent Item Name: AS350 Cable Cutter

**Start Date:** 4/16/13

Required Date: 4/30/13

Start Qty: 1.00

Required Qty: 1.00\_

646.3810

Manufactured

Manufactured

Manufactured

Manufactured

Each 8.0000

646.3510

Location ST139A

Loc Oty

Each

Loc Code

646.3511

Location ST139B

Location

2 4

Location

Loc Qty 3 Loc Code

3.0000

Each

Each

2.0000

ST

125023

125083

93300

2 2

Loc Qty

Loc Code

1.0000

646.3513

646.3512

ST139A 125083

125083

Loc Qty

1

Each

Loc Code

24.0000

\*\*

Manufactured No

Location

ST139A

Loc Oty 24 24 Loc Code

April-16-13 12:36:25 PM

Shop Packet Print

Page 2

NCR:	Yes	/ No				WORK ORDER NON-O	100	VFOR	MANCE / UPDATE		•		
											QA Closed:	Date:	
Work Ord	or.			<u>. – . – . – . – . – . – . – . – . – . –</u>	-	DISPOSITION			AGAINST	DE	PARTMENT	PROCESS	
Part No			Rework Scrap Use-as-is Work Order Update		!	Skid-tube Crosstube  Machining Small Fab  noforming Finishing  Large Fab Composite			Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other			
Root					Descri	ption of work order update		Initial	Action		Sign &		,
Cause		Date	Step	Qty	(	or Non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved		-			•								
						F	AUL	T CATE	GORY				
Landi -		Bending Centre No Cracks	•	ntric to	o/s	General Bend BOM/Route Broken/Damaged		1	ion Incomplete		Ovalized Over/Under Part Incorre	ct	Pressure/Forced Temperature/Cure Weld
1		Crushed/	Crimped.		1	Burrs		Instruct	ions Incomplete/Unclear	i	Part Lost/Mi	ssing	Wrong Stock Pulled

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Contamination

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

DQA:

Part Moved

Positioned Wrong

Power Loss/Surge

Other

Date:

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Cuffs

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

April-16-13 12:36:25 PM

Work Order ID: 799938

Parent Item:

NAS1149F0332P

646.4001

Parent Item Name: AS350 Cable Cutter

\*99938\* \*646 4001\*

No

**Start Date:** 4/16/13

Required Date: 4/30/13

Start Qty: 1.00

Required Qty: 1.00

8,710.000

Each

\*\*

MS21042L3

Purchased

Purchased

No

Location	<u>n</u>	Loc Oty	Loc Code
GA		182	
	122063	182	
ST294		158	
	122063	158	
ST295		3	
	123352	3	
st510		8367	
<u> </u>	123900	8367	
		Each	4,780.000

\*\*

Location		Loc Oty	Loc Code				
FP001		3					
	122141	3					
GA ·		119					
	122452	119					
ST314		268					
	117885	32					
	119017	55					
	119075	138					
	123265	43					
ST506		4390					
	123900	974					
	12/201	2416					

- AG /
124291
• /

						DQA:	Date:	
							•	<del></del>
icn.	V /	Al -	MODE OPPED NON	I_CONEODMANICE /	LIDDATE			

NCR:	Yes	/ No				WORK ORDER NON-	·CO	INFURI	VIAINCE / UP	DATE	QA Closed:	Date	<u>&gt;:</u>
Work Ord	or:			<u> </u>		DISPOSITION				AGAINST DE	PARTMENT,	/PROCESS	
Part I	-					Rework Scrap Use-as-is		1	Skid-tube Machining	Crosstube Small Fab Finishing	4	Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR I	No.					Work Order Update		Incin	Large Fab	Composite	]	Supplier	
Root						ption of work order update	- 1	Initial		tion	Sign &		
Cause		Date	Step	Qty		or Non-conformance	Cl	nief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data Equip/Tooling											,		
Operator	Ш												
Material	Ш						ł				-		
Setup	Ш												
Other	Ц												
Process	Ш												
Supplier	Ш												
Training	Ш		ļ										
Unapproved				<u> </u>									
					· · · · · · · · · · · · · · · · · · ·		FAU	LT CATE	GORY				
Landi	ng G	iear				General	_	7			,	_	<del></del>
	-	Bending				Bend	<u> </u>	Grain			Ovalized		Pressure/Forced
	Ш	Centre No	ot Conce	ntric to	o/s	BOM/Route	_	Hardwa	ire		Over/Under	<u> </u>	Temperature/Cure
		Cracks				Broken/Damaged		Inspect	ion Incomplete		Part Incorre	ct	Weld
	Ш	Crushed/	Crimped.			Burrs		<b>⊣</b> i	ions Incomplete/	Unclear	Part Lost/M	issing	Wrong Stock Pulled
		Cuffs				Contamination	L	Mainte	enance		Part Moved		
	$\square$	Heat Trea	at			Countersink		Mislabe	eled		Positioned V	Vrong _	
		Inspectio	n Strip in	Tube		Cut Too Short		Misread	t		Power Loss/	Surge	Other
		Ripples in	Bend			Drill Holes		Offset					
		Torque W	aves in E	xtrusio	n 「	Drawing		Out of	Calibration				

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

April-16-13 12:36:25 PM

Work Order ID: 99938

\*99938\*

Parent Item:

646,4001

\*646 4001\*

Location

ST139A

125083

97175

Parent Item Name: AS350 Cable Cutter

**Start Date: 4/16/13** 

Required Date: 4/30/13

Start Qty: 1.00

Required Qty: 1.00

646.3110

Manufactured

Each 6.0000

646.3710

646.3210

Manufactured

Loc Qty 6

Loc Qty

Each

Each

5

5

7

Each

Loc Code

Loc Code

22.0000

Manufactured No Location ST425

22 22

5.0000

Manufactured No Location ST538

Loc Qty 93488

Loc Code

\*\*

7.0000

Location ST139A

93208

Loc Qty

Loc Code

NCR: Y	⁄es	/ No				WORK ORDER NON-C	COP	NFORN	ANCE / UP	DATE		QA Closed:	Da	ate:	
						DISPOSITION				AGAINST D					
Work Orde Part N NCR N	۱٥.					Rework Scrap Use-as-is Work Order Update		Therm	Skid-tube Machining Moforming Large Fab	Crosstube Small Fab Finishing Composite		Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier			Engineering Quality Other
Root	_		<u> </u>		Descri	ption of work order update		nitial	Ac	tion	Т	Sign &			
Cause		Date	Step	Qty		or Non-conformance		ief Eng		ription		Date	Verification	n	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved									-						
						F.	AUL	T CATE	GORY						
Landi	ng G	Gear				General		-		_				_	1
Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube					o/s	Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short		Hardware Over/Under tolerance Temper Inspection Incomplete Part Incorrect Weld Instructions Incomplete/Unclear Part Lost/Missing Wrong S Maintenance Part Moved Mislabeled Positioned Wrong					Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other		

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

April-16-13 12:36:25 PM

Work Order ID: 99938

Parent Item:

646,4001

Parent Item Name: AS350 Cable Cutter

\*99938\*

\*646 4001\*

Location

Location

ST351

ST512

ST303

**Start Date:** 4/16/13

Start Oty: 1.00

Required Date: 4/30/13

Required Qty: 1.00

MS24694-S51

Purchased

No

No

AN3-13A

Bolt

AN3-4A

Purchased

Purchased

No

116805 123741

104746

120910

123759

Each

Loc Otv

108

107

Each

108.0000

Loc Code

95.0000

Loc Code

Each

Loc Qty

453.0000

Location Loc Qty ST350 318 80 38 200 ST512 135 120770 134 123900

Loc Code

			DQA:	Date:
NCR:	Yes / No	WORK ORDER NON-CONFORMANCE / UPDATE		
			OA Closed:	Date:

										QA Closed.	Date.		
Work Orde	er:				DISPOSITION				AGAINST DE	PARTMENT/	PROCESS	·	
			•		Rework	1		Skid-tube	Crosstube		Water Jet	Engineering	
Part N	lo.				Scrap	1		Machining	Small Fab	Prod	d. Eng. Coor.	₁	
					Use-as-is	1		noforming	Finishing		e/Packaging	₁ '⊢ <b>⊣</b> 1	
, NÇR N	lo.				Work Order Update	1		Large Fab	Composite	•			
		· · · · · · · · · · · · · · · · · · ·				1		· —				· · · · · · · · · · · · · · · · · · ·	
Root				Descri	ption of work order update	ln	itial	Act	ion	Sign &			
Cause	Date	Step	Qty		or Non-conformance	Chie	ef Eng	Descr	ription	Date	Verification	QC Inspector	
Doc/Data													
Equip/Tooling			Ì								· .		
Operator						1							
Material						1							
Setup													
Other													
Process													
Supplier													
Training													
Unapproved													
					FAULT CATEGORY								
Landir	ng Gear				General					_			
, .	Bendin	3			Bend		Grain			Ovalized		Pressure/Forced	
	Centre	Not Conce	ntric to	o/s	BOM/Route	∏⊦	lardwa	re		Over/Under	tolerance	Temperature/Cure	
	Cracks				Broken/Damaged		nspecti	on Incomplete		Part Incorred	ct	Weld	
	Crushe	d/Crimped			Burrs		nstruct	ions Incomplete/L	Jnclear	Part Lost/Mi	ssing	Wrong Stock Pulled	
	Cuffs				Contamination		√lainte	nance		Part Moved	, –	_	
	Heat Treat			Countersink		∕iislabe	led		Positioned V	/rong			
Inspection Strip in Tube			Cut Too Short		∕lisread	1		Power Loss/	Surge	Other			
Ripples in Bend			Drill Holes	$\Box$	Offset			•	Minutelle				
Torque Waves in Extrusion				Drawing	$\Box$	Out of C	Calibration		-				
Turning Sequence				Finish	П	Out of S	equence						
Ī	Wave/Twist in Tube				Folio	П	Outside	Dimensions				Vater Jet	

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

April-16-13 12:36:25 PM

Work Order ID: 99938

646.4001

Parent Item Name: AS350 Cable Cutter

\*99938\*

\*646 4001\*

**Start Date:** 4/16/13

Start Qty: 1.00

300.0000

Loc Code

Required Date: 4/30/13 Required Qty: 1.00

CR3213-5-3

Parent Item:

Cherry Rivet

MS20470AD5-5.5

Purchased

Purchased

No

No

Location ST329

123785

Loc Qty 300

Each

300 Each

741.0000 \*\*

646.3711

646.3712

Manufactured

Manufactured

Location ST336

Location

ST139B

Location

ST139B

123425

125083

125083

Loc Qty 741 741 Each

Loc Qty

2.0000

Loc Code

Loc Code

2.0000

Loc Oty Loc Code 2 2

2

2

Each

								DQA:	Date:	
NCR: Yes	/ No			WORK ORDER NON-C	CONFORM	MANCE / UP		QA Closed:	Date:	
Mark Ordan				DISPOSITION			AGAINST DE	PARTMENT	PROCESS	
Part No.	Part No.  NCR No.  Root Description  Cause Date Step Qty			Rework Scrap Use-as-is Work Order Update	]   '	Skid-tube  Machining  noforming  Large Fab	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering  Quality  Other
Root				Description of work order update	Initial	Ac	tion	Sign &		
	Date	Step	Qty	or Non-conformance	Chief Eng	Desc	ription	Date	Verification	QC Inspector
Ooc/Data Equip/Tooling Operator Waterial Setup Other Process						,		·		·. ·.
Supplier	]									

	FAULT CATEGORY											
Landi	ng (	Gear	General		_		_					
		Bending	Bend		Grain		Ovalized		Pressure/Forced			
		Centre Not Concentric to O/S	BOM/Route		Hardware		Over/Under tolerance		Temperature/Cure			
•		Cracks ·	Broken/Damaged		Inspection Incomplete		Part Incorrect		Weld			
	Crushed/Crimped. Burrs				Instructions Incomplete/Unclear		Part Lost/Missing		Wrong Stock Pulled			
	Cuffs Contamination			Maintenance		Part Moved		12. 41 <b>*</b> 4				
		Heat Treat	Countersink		Mislabeled		Positioned Wrong					
		Inspection Strip in Tube	Cut Too Short		Misread		Power Loss/Surge		Other			
	Ripples in Bend Drill Holes				Offset							
	Torque Waves in Extrusion Drawing				Out of Calibration							
	Turning Sequence Finish				Out of Sequence							
		Wave/Twist in Tube	Folio	Γ	Outside Dimensions							

Training Unapproved

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

- April-16-13 12:36:25 PM

Work Order ID: 99938

646.4001

\*99938\*

Parent Item Name: AS350 Cable Cutter

Parent Item:

646.3811

AN3-6A

\*646 4001\*

**Start Date: 4/16/13** 

Required Date: 4/30/13

Start Qty: 1.00

Required Qty: 1.00

Purchased

Manufactured

Location Loc Qty ST139A 29 125083 9 93224 20 Each

438.0000

29.0000

Loc Code

Each

Location Loc Oty Loc Code ST350 300 1242967 300 ST351 61 117441 34 121166 13 122993 10 123831 4 ST512 77 122814 77 Each

MS24694-S55

Purchased

No

No

92.0000

Screw

Location Loc Oty Loc Code ST303 92 124296 92

NCR:	/es	/ No				WORK ORDER NON-	CONFOR	MANCE / UPDATE	QA Closed:	Date:	
Work Orde	-r·		<del></del>			DISPOSITION		AGAINST	DEPARTMENT	/PROCESS	State of the state
Part N	٠ ، ١٥٠					Rework Scrap Use-as-is Work Order Update	Ther	Skid-tube Crosstube Machining Small Fab moforming Finishing Large Fab Composite	Pro- Rec/Stor	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					Descr	iption of work order update	Initial	Action	Sign &		
Cause		Date	Step	Qty		or Non-conformance	Chief En	Description	Date	Verification	QC Inspector
Doc/Data		-									
Equip/Tooling								·	ļ		
Operator											
Material									ļ	·	
Setup					,						
Other											
Process											·
Supplier											
Training									i		
Unapproved		:				•					
опарриотеа	FAULT CATEGORY										
Landi	ng (	Gear				General					
		Bending				Bend	Grain		Ovalized		Pressure/Forced
	Н	Centre No	nt Concer	ntric to		BOM/Route	Hardw		Over/Under	tolerance	Temperature/Cure
,		Cracks			-,"	Broken/Damaged	$\vdash$	tion Incomplete	Part Incorre	<del></del>	Weld

Instructions Incomplete/Unclear

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

DQA:

Part Lost/Missing

Positioned Wrong

Power Loss/Surge

Part Moved

Date:

Wrong Stock Pulled

Other

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Crushed/Crimped.

Inspection Strip in Tube

Torque Waves in Extrusion

Cuffs

Heat Treat

Burrs

Contamination

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

April-16-13 12:36:25 PM

Work Order ID: 199938 ...

646.4001

\*99938\*

Parent Item:

Parent Item Name: AS350 Cable Cutter

\*646 4001\*

**Start Date: 4/16/13** 

Required Date: 4/30/13

Start Qty: 1.00

Required Qty: 1.00

646.3610

Manufactured

Each

18.0000

Manufactured

Location Loc Qty 125083 125083 ST139A 11 93434 11

Each 2.0000

Loc Code

Location ST139A

2 93175 2

Each 1,756.000

Loc Code

MS20470AD5-6

646.3714

Purchased No

Manufactured

No

ST336

93185

Loc Qty Loc Code 1756 866 890

Each

9.0000

646.3812

Location ST139B

Location

Loc Qty

Loc Oty

Loc Code

												DQA:	D	ate:	
NCR:	Yes	/ No				WORK ORDER NON-C	100	<b>NFORN</b>	MANCE / UP	DATE					
				37								QA Closed:	Da	ate:	
Mork Ord	<u> </u>					DISPOSITION				AGAINST D	ΕI	PARTMENT	PROCESS		
Work Ord	er.					Rework	1		Skid-tube	Crosstube	٦		Water Jet	:	Engineering
Part I	No.					Scrap			Machining	Small Fab	┪	Prod	d. Eng. Coor	. 🗖	Quality
						Use-as-is	1	Therm	noforming	Finishing		Rec/Stor	e/Packaging		Other
· NCR I	No.					Work Order Update			Large Fab	Composite			Supplie		
,											_				<del></del>
Root					1	ption of work order update		nitial		tion		_			
Cause		Date	Step	Qty	· ·	or Non-conformance	Ch	iief Eng	Desc	ription		Date	Verification	on	QC Inspector
Doc/Data	_						ŀ						: 		
Equip/Tooling	<u> </u>														
Operator	<u> </u>		Ì		i .										
Material	L												į		
Setup	<u> </u>														·
Other															
Process	_														
Supplier	<u></u>							:							
Training	<u> </u>														
Unapproved 1				<u> </u>			<u> </u>								<u> </u>
4						<del></del>	AUL	T CATE	GORY						
Landing Gear						General	_	1		Г		1		_	10
	<u> </u>	Bending				Bend	-	Grain		-			4-1	-	1
Centre Not Concentric to O/S				o/s	BOM/Route	<u> </u>	Hardwa				1		-	1 '	
Cracks					Broken/Damaged	$\vdash$	4 '	on Incomplete			4		-		
	Crushed/Crimped.				Burrs	<u></u>		ions Incomplete/	Unclear		4	ssing		Jwrong Stock Pulled	
	<u> </u>	Cuffs			<u> </u>	Contamination	$\vdash$	Mainte		-		-		,	
	<b>—</b>	Heat Trea				Countersink	<u></u>	Mislabe		-		-	_	1 . *	
1	Inspection Strip in Tube				1	Cut Too Short	1	Misread	t	1		Power Loss/	Sign & Date Verification QC Inspector  Valized Pressure/Forced Temperature/Culture Incorrect Weld Wrong Stock Pull art Lost/Missing art Moved Ositioned Wrong Other		

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

April-16-13 12.36:25 PM

Work Order ID: 99938

Parent Item:

646.4001

Parent Item Name: AS350 Cable Cutter

\*99938\* \*646 4001\*

Location

125083

ST139d

**Start Date: 4/16/13** 

Start Qty: 1.00

Required Date: 4/30/13

Required Qty: 1.00

646.3813

Strut Bracket

MS20470AD5-7

MS21047-3

Manufactured No

Purchased

Purchased

Purchased

No

No

No

Location Loc Oty ST350 268 123831 7 124221 200 61 Each

Each

Loc Qty Loc Code 5 5

Each

2,194,000

Loc Code

268,0000

Loc Code

5.0000

Rivet

Location Loc Oty Mezz 1384 2655 799 3011 585 ST336 810 123425 810 Each

445.0000

Loc Code

Location Loc Oty ST316 445 123268 75 123301 50 123522 320

123522

NCR: Y	es / No				WORK ORDER NON-O	CONFO	<b>PRIV</b>	IANCE / UP	DATE				
								•		QA Closed:	Date		
Work Orde	r:		ч		DISPOSITION				AGAINST DE	PARTMENT	/PROCESS		
	<del></del>				Rework	]	9	Skid-tube	Crosstube	]	Water Jet	Engineering	
Part N	O				Scrap			/lachining	Small Fab	-	d. Eng. Coor.	Quality	
					Use-as-is	The		oforming	Finishing	Rec/Sto	re/Packaging	Other	
NCR N	o	•••	<del></del>	-	Work Order Update	<u> </u>	ļ	Large Fab	Composite		Supplier		
Root					ption of work order update	Initia	ı		tion	Sign &			
Cause	Date	Step	Qty		or Non-conformance	Chief E	ng	Desc	cription	Date	Verification	QC Inspector	
Doc/Data													
Equip/Tooling			,										
Operator										•			
Material	_						1						
Setup	_						-						
Other							ļ						
Process													
Supplier						1							
Training		ł								,			
Unapproved	<u>l</u>	1	II		F	AULT CA	ATFC	ORY	- u. <u></u>		1		
Landin	ıg Gear				General	7.021 07.							
[	Bending				Bend	Grai	in		Г	Ovalized	Г	Pressure/Forced	
ŀ	Centre No	ot Conce	ntric to C	o/s	BOM/Route	$\vdash$	dwar	re	<u> </u>	Over/Under	tolerance	Temperature/Cure	
<b> </b>	Cracks				Broken/Damaged	<b></b>		on Incomplete	ļ	Part Incorre	<b>⊢</b>	Weld	
F	<del> </del>	Crimped.			Burrs	<b>—</b>		ons Incomplete/	/Unclear	Part Lost/M	<u> </u>	Wrong Stock Pulled	
-	Crushed/Crimped. Cuffs				Contamination			nance		Part Moved	_		
<u> </u>	Heat Treat				Countersink	Misl	label	led		Positioned \	Vrong		
<b> </b>	Inspection Strip in Tube				Cut Too Short	Misr	read			Power Loss/		Other	
	Ripples in Bend				Drill Holes	Offs	et		_		_	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled	
	Torque W		xtrusion	,	Drawing	Out	of C	alibration				. <b>५</b>	
ļ	<del></del>				Finish	Out	of S	equence					
-	Turning Sequence Wave/Twist in Tube				Folio	Outs	side	Dimensions					



DQA:

Date:

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

April-16-13 12:36:25 PM

Work Order ID: 299938

Parent Item:

646.4001

Parent Item Name: AS350 Cable Cutter

\*99938\*

\*646 4001\*

Location

106578

123785

124231

124259

ST327

**Start Date:** 4/16/13 Start Qty: 1.00

Required Date: 4/30/13

Required Qty: 1.00

Purchased

Purchased

No

No

Each

Loc Qty

740

100

240

200

200

Each

740.0000

Loc Code

1,103.000

Loc Code

\*\*

AN3-5A

Manufactured No

Location Loc Oty FP001 122800 GA

86 86 120 117423 120 ST350 22 120187 22

122416 124561

75 800 Each 12.0000

Strut Doubler

646.3715

Location ST139B

93338

ST512

Loc Qty 12 12

875

Loc Code

									DQA:	Date: _	
NCR: Yes	s / No				WORK ORDER NON-C	CONFORM	MANCE / UP		QA Closed:	Date:	
Work Order:					DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
WOIR Older.				<del></del>	Rework	1	Skid-tube	Crosstube		Water Jet	Engineering
Part No	١.				Scrap	1 1	Machining	Small Fab	Pro	d. Eng. Coor.	Quality
					Use-as-is	4 I	noforming	Finishing	Rec/Sto	re/Packaging	Other
NCR No	١.				Work Order Update		Large Fab	Composite		Supplier	
*				·							
Root				Descr	iption of work order update	Initial		ction	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data	_]										
Equip/Tooling	_]										
Operator											
Material											
Setup											
Other				<u> </u>							
Process											
Supplier							İ				
Training											

	FAULT CATEGORY											
Landin	g Gear	General		_		_						
Γ	Bending	Bend		Grain		Ovalized	Pressure/Forced					
Γ	Centre Not Concentric to O/S	BOM/Route		Hardware		Over/Under tolerance	Temperature/Cure					
Γ	Cracks	Broken/Damaged		Inspection Incomplete		Part Incorrect	Weld					
	Crushed/Crimped	Burrs		Instructions Incomplete/Unclear		Part Lost/Missing	Wrong Stock Pulled					
. [	Cuffs	Contamination		Maintenance		Part Moved						
	Heat Treat	Countersink		Mislabeled		Positioned Wrong						
	Inspection Strip in Tube	Cut Too Short	Cut Too Short Misread			Power Loss/Surge	Other					
Γ	Ripples in Bend	Drill Holes		Offset								
Γ	Torque Waves in Extrusion	Drawing		Out of Calibration								
	Turning Sequence	Finish		Out of Sequence								
Γ	Wave/Twist in Tube Folio			Outside Dimensions								

Unapproved

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

April-16-13 12:36:25 PM

Work Order ID: 99938

646.4001

\*99938\* \*646 4001\*

**Location** 

Location

125083

100993

125083

Mezz

Parent Item Name: AS350 Cable Cutter

MS27039-1-12

Parent Item:

Purchased

No

No

No

**Start Date:** 4/16/13 Start Qty: 1.00

169.0000

Loc Code

4.0000

Loc Code

813.0000

Each

Loc Qty

Loc Oty

169

169

Each

Each

Required Date: 4/30/13

Required Qty: 1.00

Manufactured

Gauge Bracket

MS20426AD5-7

Purchased

MS24694-S54

Purchased

Location ST334

Location

ST303

101340

Loc Oty

813 813 Each Loc Code

76.0000

100/20

Loc Qty 76 123900 1

124859

75

Loc Code

											DQA:	Date:	
NCR:	Yes	/ No				<b>WORK ORDER NON-</b>	COI	<b>NFOR</b>	MANCE / UPDATE				
											QA Closed:	Date:	
Morle Ord						DISPOSITION			AGAI	NST DE	PARTMENT,	/PROCESS	
Work Ord	er.					Rework	7		Skid-tube Crosst	uhe		Water Jet	Engineering
Part I	Nο					Scrap	┪ ゙	i .	Machining Small		Pro	d. Eng. Coor.	Quality
Turci	•0.					- Use-as-is	1	1	noforming Finish	<b>——</b>		e/Packaging	Other
NCR I	No.					Work Order Update		1	Large Fab Compo	site	·	Supplier	
Root					Des	scription of work order update		Initial	Action		Sign &		
Cause		Date	Step	Qty	<u> </u>	or Non-conformance	Cr	ief Eng	Description		Date	Verification	QC inspector
Doc/Data				!									
Equip/Tooling	<u></u>											* .	
Operator					į								1
Material	_		· ·										
Setup													
Other	L						İ						
Process													
Supplier											[		
Training				İ	,								
Unapproved											<u> </u>		
							FAUI	LT CATE	GORY		·		
Landi	ng (	Gear				General	_	7		_	1	_	7
		Bending				Bend	L	Grain			Ovalized	<u> </u>	Pressure/Forced
		Centre No	ot Concer	ntric to	O/S	BOM/Route		Hardwa	re		Over/Under	<u> </u>	Temperature/Cure
	Cracks Broken/Damaged					Inspection Incomplete			Part Incorre	<del></del>	Weld		
	Crushed/CrimpedBurrs						L	Instructions Incomplete/Unclear Part Lost/Missing			issing	Wrong Stock Pulled	
1	1	Cuffe				Contamination		Mainte	nance	1	Part Moved		

Mislabeled

Out of Calibration

Out of Sequence

Outside Dimensions

Misread

Offset

Positioned Wrong

Power Loss/Surge

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

April-16-13 12.36:25 PM

Work Order ID: 99938

646.4001

Parent Item Name: AS350 Cable Cutter

\*99938\*

\*646 4001\*

MS27039-1-21

Parent Item:

Purchased

No

**Start Date: 4/16/13** 

Start Otv: 1.00

343.0000

Required Date: 4/30/13

Required Qty: 1.00

MS27039-1-19

Screw

646.3717

Purchased

Manufactured

No

Location ST306 115935

Location

Location

ST306

st510

ST506 124326

Each

Each

Loc Qty

Loc Qty

478

43

43

300

300

478.0000

Loc Code

Loc Code

\*\*

Purchased

No

124326

122814.

123522

125083

478 Each

848.0000

ST506

No

124326

746

Each

2

2

Loc Code

2.0000

\*\*

Location ST139B

Loc Qty

Loc Code

NCR: Y	es / No				WORK ORDER NON-O	O	NFORM	MANCE / UPD	ATE	QA Closed:	 Date:	
Work Orde					DISPOSITION				AGAINST DE	XX.	PROCESS	
Part N	lo			· · · · · · · · · · · · · · · · · · ·	Scrap Machining Small Use-as-is Thermoforming Finis			Crosstube Small Fab Finishing Composite	Prod. Eng. Coor. Quality  ing Rec/Store/Packaging Other			
Root				Descri	ption of work order update		nitial	Actio	on	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Ch	ief Eng	Descri	ption	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved												
					F	AUL	T CATE	GORY	· · · · · · · · · · · · · · · · · · ·			
Landin	ng Gear				General	_	1		_	<b>.</b>	_	¬
-	Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube				Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short		Grain Hardware Inspection Incomplete Instructions Incomplete/Unclear Maintenance Mislabeled Misread			Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned V Power Loss/	ct sissing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
-	Inspection Strip in Tube Ripples in Bend				Cut Too Short Drill Holes	-	Misread Offset	1		JPower Loss/	Surge	Otne

Out of Calibration
Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

April-16-13 12:36:26 PM

Work Order ID: ±99938

646.4001

\*99938\*

Parent Item Name: AS350 Cable Cutter

Parent Item:

\*646 4001\*

646.3718

646.3719

MS27039-1-10

Manufactured

Each 45.0000

Start Qty: 1,00 \*\*

Start Date: 4/16/13

Required Date: 4/30/13

Required Qty: 1.00

Manufactured No

Purchased

Location Loc Oty ST139A 125083 7 ST522 38 93365 38 Each

24.0000

Loc Code

Doubler

Location ST139B

No

125083

Loc Qty 24 24 Each

102

321.0000

Loc Code

Screw

Location Loc Qty GA 100 120449 100 ST305 101 122815 124859 100 ST308 18 123522 18 ST506 102 124326

Loc Code

Yes ,	/ No				WORK ORDER NON-C	CON	NFORN	MANCE / UPDA		OA Closed:	Date:	
					DISPOSITION						,	
Work Order:  Part No.  NCR No.					Scrap Machining Sma Use-as-is Thermoforming Fin		Small Fab Finishing	ab Prod. Eng. Coor. ng Rec/Store/Packaging		Engineering Quality Other		
				Descri	ption of work order update	1	nitial	Actio	n	Sign &		
	Date	Step	Qty	(	or Non-conformance	Ch	ief Eng	Descrip <sup>.</sup>	tion	Date	Verification	QC Inspector
					F	AUL	T CATE	GORY				
ng Ge	ar				General		•				_	7
	entre No racks rushed/C uffs eat Trea ispection	Crimped. t I Strip in		o/s	Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short		Hardwa Inspecti Instructi Mainte Mislabe Misread	on Incomplete ions Incomplete/Und nance led	clear	Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V	ct sssing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
	er:	Date  Date  Bending Centre No Cracks Crushed/C Cuffs Heat Trea Inspection	Date Step  Date Step  Date Step  Date Step  Date Step  Centre Not Concer Cracks Crushed/Crimped. Cuffs Heat Treat	Date Step Qty  Date Step Qty  Date Step Qty  Date Step Qty  Cracks Crushed/Crimped. Cuffs Heat Treat Inspection Strip in Tube	Date Step Qty  Descri Date Step Qty  Descri Date Step Qty  Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube	Paris Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube    Disposition   Rework   Scrap   Use-as-is   Work Order Update   Or Non-conformance   Find General   Bend   Bom/Route   Bom/Route   Broken/Damaged   Burrs   Contamination   Countersink   Cut Too Short   Cut Too Short	Part Step Qty Description of work order update or Non-conformance Characteristics Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube Countersink Inspection Strip in Tube Cut Too Short	Part Cate    Control Not Concentric to O/S   Bom/Route   Broken/Damaged   Crushed/Crimped   Cuffs   Contamination   Cuffs   Contamination   Cuffs   Contamination   Cuffs   Cut Too Short   Cuffs   Cut Too Short   Cuffs   Cut Too Short   Cuffs   Cut Too Short   Cit Too Sh	Paris   DISPOSITION   Rework   Skid-tube   Machining   Thermoforming   Large Fab   Large Fab      Date   Step   Qty   Description of work order update   Chief Eng   Description   Descr	DISPOSITION  Rework   Skid-tube   Crosstube   Machining   Small Fab   Finishing   Large Fab   Composite    Date   Step   Qty   Oescription of work order update   Order Eng   Description    Date   Step   Qty   Oescription of work order update   Order Eng   Description    Date   Step   Qty   Oescription of work order update   Order Eng   Description    Date   Step   Qty   Oescription of work order update   Order Eng   Description    FAULT CATEGORY  To gear   General    Bending   Bend   Grain   Hardware   Hardware   Order Eng   Oescription    Cracks   Broken/Damaged   Inspection Incomplete   Order Eng   Oescription    Cracks   Broken/Damaged   Inspection Incomplete   Oescription    Crushed/Crimped   Oescription   Oescription   Oescription   Oescription    Cuffs   Contamination   Maintenance   Oescription   Oescription   Oescription    Mislabeled   Oescription	AGAINST DEPARTMENT, Skid-tube Machining Small Fab Pro- No. Step Oty Description of work order update or Non-conformance Chief Eng Description Date  FAULT CATEGORY  General  Bending Centre Not Concentric to O/S BoM/Route Broken/Damaged Cracks Cracks Gracks Cracks Gracks Cracks Grack Cutffs Grain Ovalized Contamination Maintenance Instructions Incomplete Part Incorrect Cutffs Contamination Maintenance Part Moved Power Loss/ Heat Treat Countersink Mislabeled Positioned V Inspection Strip in Tube Cut Too Short Misraed  DISPOSITION  AGAINST DEPARTMENT, Skid-tube Machining Shall Fab Pro- Machining Shall Fab Pro- Machining Shall Fab Pro- Machining Shall Fab Pro- Machining Shall Fab Pro- Machining Shall Fab Pro- Machining Shall Fab Pro- Machining Shall Fab Pro- Machining Shall Crosstube Machining Shall Fab Pro- Machin	DISPOSITION  Rework Scrap Use-as-is Work Order Update Initial Action Composite Step Qty Or Non-conformance Centre Not Concentric to O/S Centre Not Concentric to O/S Cracks Cuffs Cunsposite Cut Too Short Missaed Cuffs Cuffs Cuffs Cuffs Cuffs Cut Too Short Missaed Power Loss/Surge Cuses/Surge Cuses/Surge Cuffs Cu

Out of Calibration
Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

April-16-13 12:36:26 PM

Work Order ID: :: 199938

Parent Item:

600.0990

600.0991

600.1012

646.4001

Parent Item Name: AS350 Cable Cutter

\*99938\* \*646 4001\*

Location

Location

125051

ST

125051

ST

**Start Date: 4/16/13** 

Start Qtv: 1.00

672.0000

Loc Code

9.0000

Loc Code

Required Date: 4/30/13

Required Qty: 1.00

AN3-11A

Purchased

Purchased

No

No

Location Loc Qty ST351 72 123525 72 ST512 600 115457 100 123352 200 123759 300 Each

Loc Code 9.0000

Loc Oty

Loc Oty

9

9

Each

Each

Purchased No

Purchased No Location Loc Oty ST 125051 9

Loc Code Each 9.0000

M120860

M12856/U

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**Shop Packet Print** 

Page 14

					•			//ANCE / UPDAT		QA Closed:	Date:	
r:	:				DISPOSITION				AGAINST DEF	PARTMENT	/PROCESS	
. Part No					Scrap Machining Small Finish Use-as-is Thermoforming Finish			imall Fab Finishing	Prod. Eng. Coor. Qualiting Rec/Store/Packaging Othe			
NCR NO.					Work order opdate	]		zarge rub ee	,posite			
	Date	Step	Qty		•	1		Action Description	on	Sign & Date	Verification	QC Inspector
		l,	<u> </u>		F	AUL	T CATE	GORY			· · · · · · · · · · · · · · · · · · ·	
	Bending Centre No Cracks Crushed/ Cuffs Heat_Trea Inspection Ripples in	Crimped at n Strip in ı Bend	Tube		General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes		Inspecti Instruct Mainte Mislabe Misread Offset	on Incomplete ions Incomplete/Uncle nance led	ear	Part Incorre Part Lost/M Part Moved Positioned V	ct issing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
	ng G	Date  Date  Date  Gear  Bending  Centre No  Cracks  Crushed/ Cuffs  Heat_Trea  Inspection Ripples in	Date Step  Date Step  Bending Centre Not Concer Cracks Crushed/Crimped Cuffs Heat_Treat Inspection Strip in Ripples in Bend	Date Step Oty  Date Step Oty  Bending Centre Not Concentric to C Cracks Crushed/Crimped. Cuffs Heat_Treat Inspection Strip in Tube Ripples in Bend	Date Step Qty  Description  Des	Rework Scrap Use-as-is Work Order Update  Date Step Qty Description of work order update or Non-conformance  Fig Gear General Bending Centre Not Concentric to O/S BOM/Route Broken/Damaged Burrs Cracks Crushed/Crimped. Cuffs Contamination Countersink Inspection Strip in Tube Ripples in Bend Drill Holes	Rework Scrap Use-as-is Work Order Update  Date Step Qty Description of work order update or Non-conformance  FAUL  Bending Gear General  Bending Centre Not Concentric to O/S BOM/Route  Cracks Broken/Damaged  Crushed/Crimped Burrs  Cuffs Contamination  Cuffs Contamination  Heat_Treat Countersink  Inspection Strip in Tube Ripples in Bend  Drill Holes	Rework Scrap Use-as-is Work Order Update On Non-conformance Chief Eng    Date   Step   Qty   Order Opdate   Chief Eng	Rework Scrap Use-as-is Work Order Update Use-as-is Work Order Update Initial Large Fab Companied	Principle of the princi	Proposition   Pr	DISPOSITION   Rework   Scrap   Use-as-is   Work Order Update   Use-as-is   Work Order Update   Use-as-is   Use-a

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

April-16-13 12:36:26 PM

Work Order ID: >99938

646.4001

\*99938\* \*646 4001\*

Location

Location

Location

ST139B

ST139d

Location

ST139A

ST139d

Parent Item Name: AS350 Cable Cutter

Parent Item:

600.0129

Tape Primer

646.3910

646.3911

Purchased

Manufactured

Manufactured

No

Purchased No

ST

ST139A

No

No

125154

125083

125031

945 945 Each

Loc Oty

Loc Oty

128

128

Each

72.0000

Loc Code

Loc Code

945.0000

Loc Code

22 22 50

Loc Qty

Loc Oty

50 Each

20.0000

Loc Code

125083 19 93362 19

**Start Date: 4/16/13** 

Start Qty: 1.00 128.0000

Required Date: 4/30/13

Required Qty; 1.00

125154

April-16-13 12:36:26 PM

**Shop Packet Print** 

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NCR:	Yes	/ No				WORK ORDER NON-	O	NFORN	AANCE / UP	DATE		OA Clasadi	·	ite:	
							1	1				QA Closed:	U	ite:	
Work Ord	or.					DISPOSITION				AGAINST D	EF	PARTMENT	PROCESS		
Part I	•					Rework Scrap Use-as-is		P	Skid-tube Machining Moforming	Crosstube Small Fab Finishing			Water Jet d. Eng. Coor e/Packaging		Engineering Quality Other
NCR I	No.		· · · · · · · · · · · · · · · · · · ·			Work Order Update		ľ	Large Fab	Composite			Supplier	-	
Root					Descri	ption of work order update		Initial	Act	tion		Sign &			_
Cause		Date	Step	Qty	(	or Non-conformance	Ch	nief Eng	Desc	ription		Date	Verification	n	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved															
Опарргочеи		<u> </u>	L			F	ΔШ	LT CATE	GORY						
Landi	ng (	Gear				General									
		Bending Centre No Cracks Crushed/ Cuffs Heat Trea Inspection	Crimped.		o/s	Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short		-1 '	on Incomplete ions Incomplete/i nance led	Unclear		Ovalized Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	ct ssing Vrong		Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
1		Rinnles in	Rend			Drill Holes		Offset		<del></del>					

Out of Calibration

Outside Dimensions

Out of Sequence

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

April-16-13 12:36:26 PM

Work Order ID: 1399938

646.4001

\*99938\*

Parent Item Name: AS350 Cable Cutter

Parent Item:

\*646 4001\*

**Start Date:** 4/16/13

Required Date: 4/30/13

Start Qty: 1.00

Required Qty: 1.00

646.3912

Manufactured

Each

73.0000

Loc Code





Manufactured No

Location Loc Oty ST139A 22 125083 22 ST139d 51 93423 51 Each

36.0000



646.3913

Purchased No Location Loc Oty ST139B 16 16 ST139d 20 93160 20 Each

Loc Code 59.0000

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AN3-12A

Location Loc Oty GA

48

122407 ST351 114536 123352 ST512 48

123759

Loc Code

123759

											DQA:	Date	e:	
NCR:	Yes	/ No				WORK ORDER NON-C	100	NFORI\	ANCE / UPDATE					
											QA Closed:	Date	e:	······································
Work Ord	۰.					DISPOSITION			AGAINS	T DE	PARTMENT	/PROCESS		
WORK OIG	ет.					Rework	1		Skid-tube Crosstub	e 🗀		Water Jet		Engineering
Part I	No.					Scrap	1		Machining Small Fa	ıb	Pro	d. Eng. Coor.		Quality
						Use-as-is			noforming Finishir	~ —	Rec/Stor	e/Packaging	_	Other
NCR I	Vo.	·	<del></del>			Work Order Update	]		Large Fab Composit	te[]		Supplier		
Root					Descri	ption of work order update		Initial	Action		Sign &			
Cause		Date	Step	Qty		or Non-conformance	Ch	nief Eng	Description		Date	Verification	4	QC Inspector
Doc/Data			1											
Equip/Tooling									•					
Operator				,										
Material	L.		1											
Setup	٠.													
Other	<u> </u>													
Process														
Supplier	L													
Training	<u></u>				•									
Unapproved	<u>.</u>		<u> </u>									<u> </u>		
						F	AUI	LT CATE	GORY					; *
Landi	ng (	7			<del></del>	General	_	1			1	г	<b>—</b>	<b>-</b>
	_	Bending			<u> </u>	Bend	$\perp$	Grain			Ovalized		— 1	ressure/Forced
	L	Centre N	ot Conce	ntric to	o/s	BOM/Route	L	Hardwa		<u> </u>	Over/Under	h h		emperature/Cure
		Cracks				Broken/Damaged	<u></u>	<b>-</b>   '	on Incomplete	<u> </u>	Part Incorre	}	—	Veld
	<u></u>	Crushed/	Crimped			Burrs		-	ions Incomplete/Unclear	<u> </u>	Part Lost/M	issing	\^	Vrong Stock Pulled
	Cuffs Contamination					Contamination	$\perp$	Mainte	nance	<u> </u>	Part Moved			
	L	Heat Trea	at			Countersink	L	Mislabe	led	<u> </u>	Positioned \		,	•
		Inspectio	n Strip in	Tube		Cut Too Short		Misread			Power Loss/	'Surge	C	Other
	Ripples in Bend					Drill Holes		Offset						

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

April-16-13 12:36:26 PM

Work Order ID: 99938

Parent Item:

646.4001

Parent Item Name: AS350 Cable Cutter

\*99938\*

\*646 4001\*

**Start Date:** 4/16/13

Required Date: 4/30/13

Required Qty: 1.00

Start Qty: 1.00

MS27039-1-16

Purchased

No

Each

70.0000

Loc Code

Location ST306

122993

Loc Qty

70 70

122993

April-16-13 12:36:26 PM

**Shop Packet Print** 

Page 17

										DQA:	Date:					
NCR:	es /	No				WORK ORDER NON-C	ONFOR	MANCE / UPD	ATE		-					
										QA Closed:	Date:	У 4				
<b>147</b>						DISPOSITION		AGAINST DEPARTMENT/PROCESS								
Work Orde	er:					Rework		Skid-tube	Crosstube	1	Water Jet	Engineering				
Part N	do.					Scrap		Machining	Small Fab	Pro	d. Eng. Coor.	Quality				
* ~*			<del></del>			Use-as-is	Ther	moforming	Finishing	4	re/Packaging	Other				
NCR N	No.					Work Order Update		Large Fab	Composite	1	Supplier					
Root					Descri	ption of work order update	Initial	Acti		Sign &						
Cause	Da	te St	ер	Qty	(	or Non-conformance	Chief En	g Descri	ption	Date	Verification	QC Inspector				
Doc/Data											•					
Equip/Tooling																
Operator																
Material									•							
Setup					i		ļ									
Other								1								
Process							:									
Supplier	Н															
Training							İ									
Unapproved			L				AULT CAT	CORV		<u> </u>						
						General	AULI CAI	EGORT								
Landi	ng Gear	I				Bend	Grain		<u></u>	Ovalized	_	Pressure/Forced				
	Bending Control Not Concentris to Q/S					BOM/Route	Hardw	rare	<del> </del>	Over/Under	tolerance	Temperature/Cure				
	Centre Not Concentric to O/S Cracks				· -	Broken/Damaged		tion Incomplete	-	Part Incorre	<b></b>	Weld				
	Crushed/Crimped.				-	Burrs	<del>-</del>	ctions Incomplete/U	Inclear	Part Lost/M	<del></del>	Wrong Stock Pulled				
	Cuffs					Contamination	<b>—</b>	Maintenance			<u> </u>	~				

Mislabeled

Out of Calibration

Out of Sequence

Outside Dimensions

Misread

Offset

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

Positioned Wrong

Power Loss/Surge

Other

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

·		
	ENGINEERING CHANGE NOTICE NO 03079   SHEET 1 JF 1	
APICAL	DWG NO. 646.4000 REV: A PREPARED N.CAP DATE: 03/21/11 EFFECT ON DWG	
INDUSTRIES, INC.	DWG TITLE: AS350 CABLE CUTTERS KIT	
	APPROVED BY, ENGR BAND MFG David But OC Winning Sense EFF, NEXT ORDER	
TRANSACTION CODES (TC); A-ADD C-CREATE R-REVISE D-DELETE	REASON CREATED FIXED AND CCK WITHOUT FIXED PROVISIONS KIT	
SHEET 1,	1	
nan kalonggan saga	1	
	1   1   60   646.3913   STRUT     1   1   6   646.3912   STRUT     1   1   1   1   1   1   1   1   1	

DOCUMENTS EFFECTED

CHANGE CATEGORY

MDL MINSTALL INSTRUC MICA MIBON MAJOR MINOR

PRHAES CLASS 3

DER REVIEW REQUIRED

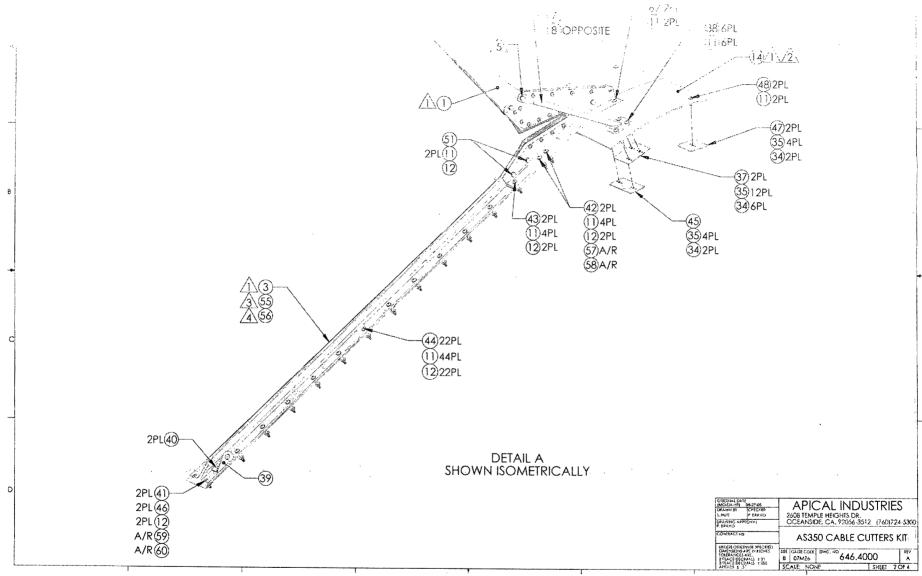
O YES X NO

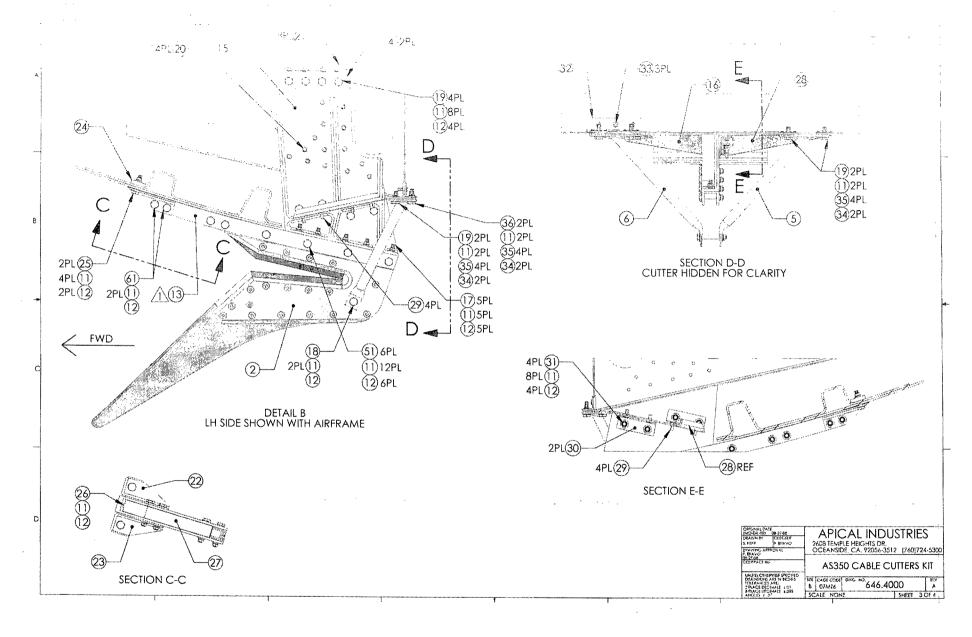
ASSIGNATION ASSISTANCE
ASSISTANCE CUITIES KIT
JE SCRIPTUN

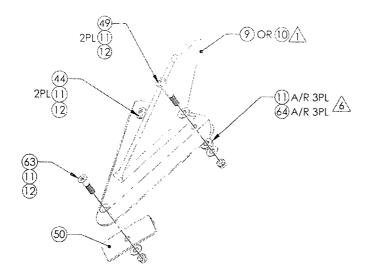
	ENGINE	ERING CH	ANGE NUTICE			SHE	
APTCAL	DWG N	0. 646.4000	REV: A	PREPARED J. JAC	KSON DATE:	01/24/11	EFFECT ON DWG  O INC. W UNINC.
INDUSTRIES, INC.	DWG T	ITLE: AS3	50 CÁBLE CU	TTERS KIT	Samuel Annual An	•	
	APPROVED B	Y. ENGR Bro	meg D	avit Peulu	OC MOUNT SALEN	EFF:	NEXT ORDER
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE	REASON	I: ADDÉD GPS ADDED NOT	: MQUNT KIT, F/I	N 65. REVISED I	DRAWING VIEWS	<b>3</b> (./	
SHEET 1, ZONE B1  AT CUSTO  SHEET 2, ZONE A4	MERS OPT	ION, INSTALL	7 8 OPPOSITE	SHEET 3	DETAIL D INSTALLAT		
65 A 647.5701	REF	GPS MOUNT	VIT		T A		
F/N TC PART NUMBER	.4001	UES MUUNI	DESCRIPTION	- 54277364 Panas	MATERIA	L · · · · S	PECIFICATION
DOCUMENTS EFFECTED:	<u> QTY</u>	□ MDL □ INS	TALL INSTRUC	CHAN	NGE CATEGORY ADOR MINOR	DER REVIEW	

NOVES. 11 AFTER MISTALLATION, APPLY FIN 34 A/R TO FILL GAPS AND FILLET EDGES + 11. 22. /2\ INSTALL F/N 14 WITH F/N 52 & 53 3M VHB ADHESIVE TAPE .025" THICK X .50" WIDI-VENDOR : MCMASTER-CARR P/N 7.5935A651 52 (600,099) 51 601 2836 50 646 3814 49 601 2910 W PUP BRACKS SCREW 3M TAPE PRIMER 94, APPLY TO BOTH SURFACES A/R BEFORE TAPE VENDOR: R.S. HUGHES P/N 021200-24216 48 601.1365 47 546.3719 46 646,3718 45 646,3717 CUSTOM WASHE DOUBLER SCREW REUSE FASTENERS FROM F/N 1 2 22 44 601.1948 2 43 601.1952 14522039 : 49 6 USE WASHERS AS REQUIRED AS SHIMS TO OBTAIN BEST FILMENT SCREW #A502037 + 33 4 42 601,1956 2 41 601,2829 SCREW 44927032-1-11 SCREW 8/\$2/\$6/4554 2 40 601.2831 M\$20428A05-7 39 646.3716 GAUGE BRACKET 59 696.3/16 6 38 601.1953 2 37 646.3715 2 36 601.2824 36 35 601.2277 18 34 600.0795 3 33 601.2566 MS07039-1-17 SCREW STRUT DOUBLER
BOLL
RIVET A143-54 CCP24153-3-40 NUTPLATE 27821047-3 RIVET 85520470405 -DETAIL A 32 646,3813 STRUT BRACKET 4 31 601.2522 2 30 646.3812 8 29 601.2564 1 28 646.3714 1 27 646.3610 AN3-3A GUSSET BRACKET RIVET GUSSET FELLER MSC0470A05-6 1 26 601,2830 SCREW M574694555 DETAIL C-25 601.2825 BOLT At13-6A 24 646.3811 23 646.3712 22 646.3711 21 601.2832 20 601.2020 19 601.2823 18 601.2827 RADIUS BLOCK RIVET CR3213-5-3 10 BOLI AN3-13A SCREW 646,4002 17 601.2912 M\$24694551 1 16 646.3713 1 15 646.3210 GUSSET SUPPOR 1 14 646.3710 DOUBLER CHANNEL 646.4001 13 646.3110 63 12 601.1624 LOCKNUT M\$21043E3 134 11 601.1607 WASHER NAS1749802378 10 646,3411 RH WIPER DEFLECTOR DETAIL B 9 646,3410 LH WIPER DEFLECTOR 8 646.3513 STRUT 646.3512 646.3511 646.3510 64 601,3151 WASHER NAC-14970363F 63 601.2911 2 62 601.2637 SCREW MS24694553 4 646.3810 BRACKE SCREW MS27039-1-16 646.2910 DEFLECTOR 61 601.2763 BOLT ANS 12A 646,3001 646,3301 LOWER CUTTER ASSY 1 60 646,3913 MIHZ UPPER CUITER ASSY ASSESSMENT DELECTOR OF 4 59 646.3912 1 58 646.3911 \*\*\*\* FIND # PARI # SHIM 646,4002 SHIM 646.4001 ASSEST CARLE CUTTERS IST MATE SPEC DESCRIPTION QTY NEXT ASSY (S) APICAL INDUSTRIES DRAWNERY CRESSER SHUTE P. BRAYO 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300 DEAVIS APPOVAL CO-RIVECTION **AS350 CABLE CUTTERS KIT** 646.4000 B 07M26

The DINNER OF THE PARTY.



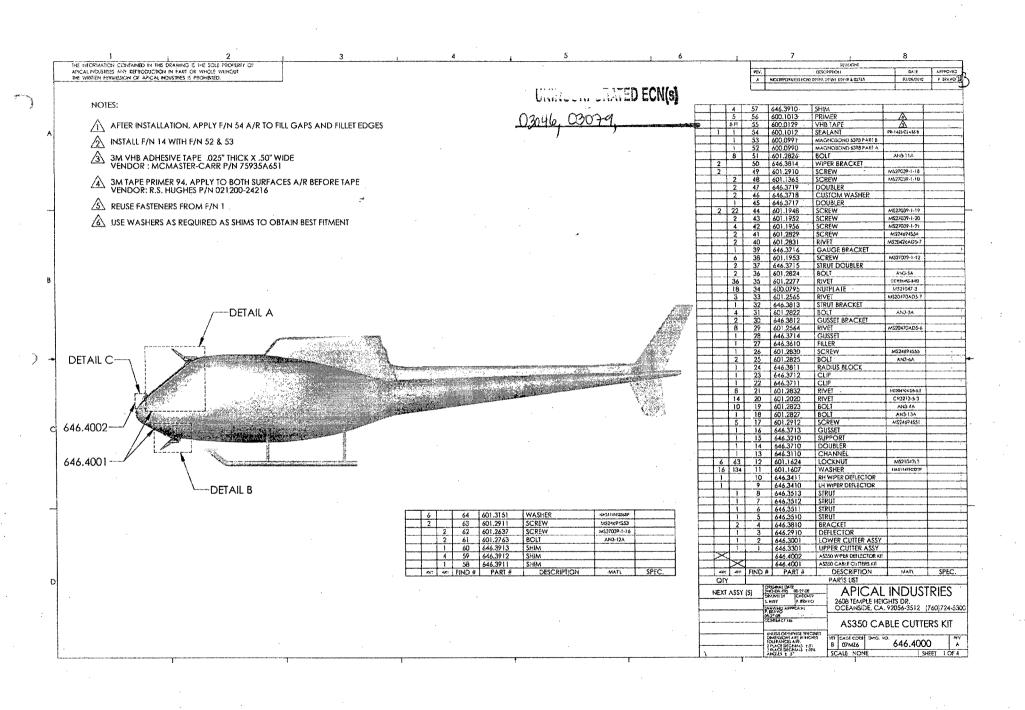




DETAIL C LH SHOWN EXPLODED RH OPPOSITE

ORIDHOL DATE (MO-DA-YR) 08-07-08	APICAL INDUSTRIES
URAWN'S CHICKLY S HIEF PERAVO  DPAWNO APPECVAL	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-530
T BRAYCI (8-27-08 COHEFACT No.	AS350 CABLE CUTTERS KIT
UMEN CIMERASE SPECIFOD DIABACIAN AND REPORTS TOLEPANCES ARE: 7 FIACE DECIPAIS ±05 SPIACE DECIPAIS ±05	30E CACE COOF 2000 NO 646.4000 A

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·	ENGINEERING	CHANGE NOTION	CE NO 030	79	SHE	ET 1 JOF 1
APICAL	DWG NO. 646	.4000 RE	V: A PREPAR	N.CAP	DATE: 03/21/11	EFFECT ON DWG
INDUSTRIES, INC.	DWG TITLE:	AS350 CABLE	CUTTERS KI	T		
	APPROVED BY	2 Baro	MFG Davit Ba	to ach	ourselfera EFFI	NEXT ORDER
TRANSACTION CODES (TC) A-ADD C-CREATE R-REVISE D-DELETE	REASON: CRE	TED FIXED A			ROVISIONS KIT	
SHEET 1,	B□M, IS:			8 8 8 8 8 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	30 646.3814 VPER BRACKET 49 6012910 SCREW 48 601345 SCREW 47 646.3719 DUBLER 46 646.3719 DUBLER 46 646.3717 DUBLER 47 646.3718 CLSTDN VASHER 48 6013948 SCREW 49 6013948 SCREW 40 6013948 SCREW 40 6012829 SCREW 41 6012829 SCREW 42 6013956 SCREW 43 6013956 SCREW 44 6012829 SCREW 45 646.3716 GALGE BRACKET 46 6012821 RIVET 47 646.3715 SCREW 48 6012824 BRLT 48 6012825 BRLT 48 6012825 B	IRENATARIS-4
	REF   REF   SS   S4   S4   S4   S5   S5   S6   S6   S6   S6   S6   S6	647,5701 GPS HOUNT KIT 691,3151 VASHER 601,2911 SCREV 601,2637 SCREV 646,3913 SMIN ( 646,3913 SMIN ( 646,3913 SMIN ( 646,3910 SMIN ( 646,3910 SMIN ( 646,3910 SMIN ( 646,3910 SMIN ( 646,3910 SMIN ( 646,3910 SMIN ( 646,3910 SMIN ( 646,3910 SMIN ( 646,3910 SMIN ( 646,3910 SMIN ( 646,3910 SMIN ( 600,0103 PRIMER ( 600,0103 SEALANT ( PART () IESCRIPTION	BECCHERCASP  RS246P4SS3  (*RS2793P-1-15	8	21. 601.2822 RIVET 20. 601.2822 RIVET 19. 601.2823 RIVET 19. 601.2823 RIVET 19. 601.2823 RIVET 19. 601.2827 RIVET 16. 646.3210 RIVET 15. 646.3210 SUPPORT 15. 646.3210 RIVET 16. 646.3210 RIVET 17. 601.2827 RIVET 18. 646.3210 RIVET 19. 646.3210 RIVET 19. 646.3210 RIVET 10. 646.331	
DOCUMENTS EFFECTED:	⊠ MDL	☑ INSTALL INST	TRUC 🖾 ICA I	CHANGE C	ATEGORY DER REVIEN	√ REQUIRED ⊠ NO

April-16 13 12:36:20 PM Item ID: 646.4001 Accept Revision ID: Item Name: AS350 Cable Cutter Start Date: 4/16/13 Start Qty: 1.00 Required Date: 4/30/13 Req'd Qty: 1.00 Reference: Process Plan: MC5 Approvals: Date: 13-04-16 Tooling: QC: Date: SPC (Y/N): Sequence ID/ Operation Set Up/ Work Center ID Description **Run Hours Draw Nbr** Revision Nbr 646.4000 0.00 \*100\* DOCUMENT CONTROL DC Memo 0.00 Document Control Photocopy bluefile & type labels per PPP 646.4001 110 Pick Kit 0.00 \*110\* Packaging Memo 0.00 Packaging 120 QC4-100% Inspect kits for completeness 0.00 \*120\* QC Memo 0.00

Cust Item ID: **Customer:** 

Date:

\*N900040100\*

Date:

Run Stop

Tool ID

Tool # Plan Accept Code Qty

Reject Qty

Setup Start

Stop

Reject Insp. Number Stamp

MCJ 13-04-26

**Quality Control**